REMARKS

A check for the fee for a one-month extension of time accompanies this response. Any fees that may be due in connection with the filing of this paper or with this application should be charged to Deposit Account No. 02-1818. If a Petition for extension of time is needed, this paper is to be considered such Petition.

Claims 1-18 and 34-39 are pending. Claim 1 is amended for clarity. No new matter is added. An executed Declaration of Dr. Thomas J. Borody pursuant to 37 C.F.R. §1.132 accompanies this response.

REJECTION OF CLAIMS 1-7 AND 39 UNDER 35 U.S.C. § 102(b) – Wolf *et al.*

Claims 1-7 and 39 are rejected under 35 U.S.C. § 102(b) as anticipated by Wolf *et al.* (WO 01/67895), which discloses an unflavored liquid nutritional that includes 4.607 kg fructooligosaccharides, 2.4 kg magnesium chloride, 1.18 kg sodium citrate, 1.146 kg potassium citrate and 1.134 kg sodium hydroxide (Table 6). The Examiner alleges that the claim does not read that the total number of minimally degradable sugars has to be 1 to 3 times the weight of the sodium salt in the composition, but instead that at least one water soluble minimally degradable salt is 1 to 3 times the weight of the sodium salt in the composition. Reconsideration of the grounds for the rejection is respectfully requested in view of the amendments herein and the following remarks.

ANALYSIS

Wolf *et al.* discloses a composition that includes water-soluble minimally degradable sugar (Fibersol®-2 digestion resistant maltodextrin and fructo-oligosaccharides), where the total weight of the minimally degradable sugar in the composition is 5.63 times the weight of the sodium salt in the composition. Claim 1 is amended to make clear that the total amount of water-soluble minimally degradable sugar in the composition is from about 1 to about 3 times the weight of sodium salt in the composition. Wolf *et al.* does not disclose a composition that includes a total weight of water-soluble minimally degradable sugar in the composition from about 1 to about 3 times the weight of sodium salt in the composition. Thus, Wolf *et al.* does not disclose all elements as claimed. Therefore, Wolf *et al.* does not anticipate claim 1 nor any claim depending therefrom.

REJECTION OF CLAIMS 2, 8-11, 37 AND 38 UNDER 35 U.S.C. 103(a)

Claims 2, 8-11, 37 and 38 are rejected under 35 U.S.C. 103 (a) as unpatentable over Kawakami (JP 05306221) in view of Colliopoulos (US 5,232,699) in view of Cockerill (US 4, 452,779) because Kawakami teaches every element of the claims except xylose as a

minimally degradable sugar, magnesium sulfate as a water-soluble magnesium salt and a hypertonic aqueous solution, but Colliopoulos and Cockerill teach the elements missing from Kawakami. The Examiner alleges that Colliopoulos teaches laxative compositions containing sennosides and psyllium dispersed in fat and that xylose, ribose, glucose, mannose, galactose, fructose, dextrose, sucrose, maltose, partially hydrolyzed starch, corn syrup or sugar alcohols or mixtures thereof can be used as sweetening agents (col. 6, lines 51-61). The Examiner alleges that Cockerill teaches that a saline cathartic or laxative component can be selected from among potassium sulfate, potassium chloride, sodium sulfate, sodium chloride, sodium phosphate, sodium tartrate, sodium citrate, magnesium sulfate, magnesium phosphate, magnesium oxide, magnesium hydroxide, magnesium tartrate and magnesium carbonate (col. 2, lines 19-25). The Examiner alleges that it would have been obvious to one of ordinary skill in the art to combine the teachings of Kawakami, Colliopoulos and Cockerill and use xylose as the minimally degradable sugar in the composition of Kawakami and to use magnesium sulfate as the water-soluble magnesium salt in a hypertonic solution. Reconsideration of the grounds for the rejection is respectfully requested in view of the amendments herein and the following remarks.

Relevant Law

For *prima facie* obviousness of claimed subject matter to be established under 35 U.S.C. §103, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). This principle of U.S. law regarding obviousness was **not** altered by the recent Supreme Court holding in KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727, 82 USPQ2d 1385 (2007). In KSR, the Supreme Court stated that "Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007).

The mere fact that prior art may be modified to produce the claimed product does not make the modification obvious unless the prior art suggests the desirability of the modification. In re Fritch, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992); see, also, In re Papesch, 315 F.2d 381, 137 U.S.P.Q. 43 (CCPA 1963). Further, that which is within the capabilities of one skilled in the art is not synonymous with that which is obvious. *Ex parte Gerlach*, 212 USPQ 471 (Bd. APP. 1980). In addition, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the

references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Furthermore, the Supreme Court in KSR took the opportunity to reiterate a second long-standing principle of U.S. law: that a holding of obviousness requires the fact finder (here, the Examiner), to make explicit the analysis supporting a rejection under 35 U.S.C. 103, stating that "rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Id. at 1740-41, 82 USPQ2d at 1396 (citing In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

While the KSR Court rejected a rigid application of the teaching, suggestion, or motivation ("TSM") test in an obviousness inquiry, the Court acknowledged the importance of identifying "a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" in an obviousness determination. KSR, 127 S. Ct. at 1731. The court stated in dicta that, where there is a

> "market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try **might** show that it was obvious under § 103."

In a post-KSR decision, PharmaStem Therapeutics. Inc. v. ViaCell. Inc., 491 F.3d 1342 (Fed. Cir. 2007), the Federal Circuit stated that:

> an invention would not be invalid for obviousness if the inventor would have been motivated to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful. Likewise, an invention would not be deemed obvious if all that was suggested was to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it.

Furthermore, KSR has not overruled existing case law. See In re Papesch, (315 F.2d 381, 137 USPQ 43 (CCPA 1963)), In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991), and In re Deuel (51 F.3d 1552, 1558-59, 34 USPQ2d 1210, 1215 (Fed. Cir. 1995)). "In cases involving new compounds, it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish prima facie obviousness of a new claimed compound." Takeda v. Alphapharm, 492 F.3d 1350 (Fed. Cir. 2007).

The disclosure of the applicant cannot be used to hunt through the prior art for the claimed elements and then combine them as claimed. In re Laskowski, 871 F.2d 115, 117, 10 USPQ2d 1397, 1398 (Fed. Cir. 1989). "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher" W.L. Gore & Associates, Inc. v. Garlock Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

The Claims

Claims 2, 8, 9, 37 and 38 ultimately depend from claim 1, which is discussed above, and include every limitation thereof. Claim 2 states that the minimally degradable sugar in the composition of claim 1 is selected from xylose, xylotriose, xylooligosaccharides, fructooligosaccharides, fructosans, galactooligosaccharides, other oligosaccharides, and mixtures thereof. Claim 37 states that minimally degradable sugar in the composition of claim 1 is xylose. Claim 38 depends from claim 1 and recites that the water-soluble sodium salt includes sodium chloride; the water-soluble minimally degradable sugar includes xylose; the water-soluble potassium salt includes potassium chloride; and the water-soluble magnesium salt includes magnesium sulfate.

Claim 8 recites a purgative containing a hypertonic aqueous solution of the composition of claim 1. Claim 9 depends from claim 8 and states that the purgative is in the form of a unit dose having a volume of from about 0.2 to 0.5L, and that the unit dose includes from about 1 to about 10g of the sodium salt or salts, from about 2 to about 20g of the minimally degradable sugar or sugars, from about 0.5 to about 5g of the potassium salt or salts and from about 1 to about 10g of the magnesium salt or salts.

The teachings of the cited art and differences from the claimed subject matter.

Kawakami (JP 05306221)

Kawakami teaches a composition that includes 32.3 to 35.7 gm of magnesium citrate in 900 ml of an aqueous solution of 4.8 to 5.4 mmol sodium chloride, 8.5 to 9.3 mmol potassium hydrate [potassium hydroxide] and 2.1 to 10.7 gram sugars (paragraph [0014]). Kawakami teaches that exemplary sugars in its formulation include sucrose, maltose, grape sugar, fructose and invert sugar (paragraph [0016]). None of these is a minimally degradable sugar. None is resistant to endogenous digestion in the gastrointestinal tract. Kawakami also teaches that its purgative is isotonic (paragraphs [0017] and [0018]).

Kawakami does not teach or suggest a composition that includes at least one water-soluble minimally degradable sugar. Kawakami also fails to teach or suggest a composition that includes a minimally degradable sugar at the required ratio to sodium salt. Kawakami also fails to teach or suggest a composition that is a hypertonic aqueous solution as recited in claim 8. Therefore, Kawakami fails to teach at least these elements of the claimed compositions. The secondary references fail to teach or suggest these elements.

Colliopoulos (US 5,232,699)

Colliopoulos teaches laxative compositions containing psyllium and sennosides dispersed in a food grade fat and 5% to about 40% of sweetening agent. Colliopoulos describes a unit dosage in the form of a baked wafer. Colliopoulos provides a long list of sweeteners, including xylose, ribose, glucose, mannose, galactose, fructose, dextrose, sucrose, maltose, partially hydrolyzed starch and corn syrup solids. These are added as sweeteners and there is no teaching or suggestion for selecting a minimally degradable sugar nor selecting the requisite amount of minimally degradable sugar in an amount from about 1 to about 3 times the weight of sodium salt in the composition. The patent mentions sodium only with respect to sodium saccharin salts, sodium stearoyl fumarate as a dough softener and sodium-containing non-yeast leavening agents when the laxative is in the form of a baked good. There is no teaching of the amount of these agents in the compositions of Colliopoulos. Hence, Colliopoulos does not teach or suggest a composition that includes a minimally degradable sugar in an amount from about 1 to about 3 times the weight of sodium salt in the composition.

Thus, Colliopoulos fails to teach the elements missing in the teaching of Kawakami: 1) Colliopoulos, while including xylose among a laundry list of sweeteners, does not suggest selection of a minimally degradable sugar from amongst the sugars suggested as sweeteners; 2) a composition that includes a minimally degradable sugar at the required ratio to sodium salt, i.e., in an amount from about 1 to about 3 times the weight of sodium salt in the composition, and 3) a composition that is a hypertonic aqueous solution as recited in claim 8. Colliopoulos fails to teach at least these elements of the claimed compositions. Therefore, Colliopoulos fails to cure the deficiencies in the teachings of Kawakami.

Cockerill (US 4,452,779)

Cockerill fails to teach or suggest the elements missing from the combination of Kawakami and Colliopoulos. Cockerill teaches compositions for increasing the quantity and quality of the milk produced by a lactating mammal by removing excess fluids from

mammary tissue (col. 1, lines 5-11). The composition includes (1) a non-toxic diuretic in an amount effective for withdrawing excess fluid from the mammary tissue into the blood and removing the fluid via the kidneys as urine; (2) a non-toxic saline cathartic in an amount effective for withdrawing fluid from mammary tissue into the intestinal tract of the lactating mammal preferably by providing a hypertonic solution in the intestine; and (3) a non-toxic irritant cathartic in an amount effective for readily emptying the contents of the intestinal tract of the lactating mammal, where the components of the composition provide a source of potassium and magnesium in addition to sodium in amounts that maintain a normal electrolyte balance in the body fluids so as to avoid dehydration of the mammal (col. 1, line 60 through col. 2, line 8). In one embodiment, the composition includes, on a weight basis, about 65 percent anhydrous sodium sulfate, about 13 percent magnesium sulfate monohydrate, about 12 percent sulfur and about 10 percent anhydrous potassium sulfate (col. 3, lines 10-15).

The compositions of Cockerill do not include a minimally degradable sugar nor any sugar. Cockerill does not teach or suggest including a minimally degradable sugar, such as xylose, in any formula. The compositions of Cockerill are dry powders that can be added to animal feed to reduce excess fluids from mammary tissue. The only mention of a hypertonic solution in Cockerill is at col. 2, lines 19-37, which recites:

> A suitable saline cathartic or laxative component can be selected from the group comprising potassium sulfate, potassium chloride, sodium sulfate, sodium chloride, sodium phosphate, sodium tartrate, sodium citrate, magnesium sulfate, magnesium phosphate, magnesium oxide, magnesium hydroxide, magnesium tartrate, and magnesium carbonate. The compounds which are less readily absorbed are preferred for use as the saline cathartic component of the composition and for providing a hypertonic solution in the intestinal tract. The saline cathartics preferably ***form a hypertonic solution in the intestine*** and the water draining into the intestine by osmotic pressure significantly increases the liquid bulk within the intestine which has an effect similar to other bulk cathartics or laxatives. Where a large amount of a bulking agent is used in combination with the composition the amount of the cathartic used in the composition can be reduced. [emphasis added]

Hence, Cockerill teaches that including certain salts in its composition will ***form*** a hypertonic solution in the intestinal tract and that this formation in the intestine will set up an osmotic pressure differential driving water into the intestine. There is no mention, teaching or suggestion of a purgative in the form of an aqueous hypertonic solution in Cockerill.

Thus, Cockerill fails to teach the elements missing in the teachings of Kawakami and Colliopoulos: 1) a minimally degradable sugar; 2) a composition that includes a minimally degradable sugar at the required ratio to sodium salt and 3) a composition that is a hypertonic

aqueous solution as recited in claim 8. Therefore, Cockerill does not provide any elements missing from the combination of Kawakami and Colliopoulos.

ANALYSIS

It respectfully is submitted that the Examiner has failed to set forth a case of *prima facie* obviousness for the following reasons.

The combination of the teachings of Kawakami and Colliopoulos and Cockerill does not result in the compositions of claims 2, 8, 9, 37 and 38

Therefore, the combination of teachings of Kawakami and Colliopoulos and Cockerill. does not teach or suggest 1) a minimally degradable sugar; 2) a composition that includes a minimally degradable sugar in an amount from about 1 to about 3 times the weight of sodium salt in the composition and 3) a composition that is a hypertonic aqueous solution as recited in claim 8.

Kawakami does not teach or suggest a composition that includes minimally degradable sugar in an amount from about 1 to about 3 times the weight of sodium salt in the composition. All of the sugars in Kawakami are easily digested. Further, the ratio of its degradable sugar to sodium salt in the composition of Kawakami is more than twice the upper recited limit of the minimally degradable sugar in the instant compositions (see the Attachment for the calculations). Finally, with respect to instant claim 8, the compositions of Kawakami are isotonic. Neither Colliopoulos nor Cockerill, alone or in combination, cures these defects.

Colliopoulos does not teach or suggest the elements of the instant claims missing from the teachings of Kawakami. There is no teaching or suggestion in Colliopoulos to select a minimally degradable sugar, such as xylose, nor of any composition that includes such sugar at the required ratio to sodium salt. The compositions or Colliopoulos are baked wafers. There is no teaching or suggestion of a hypertonic aqueous solution. Thus, combining the teachings of Kawakami and Colliopoulos does not result in the compositions of claim 1 or claim 8.

Cockerill does not teach or suggest the elements of the instant claims missing from the combination of the teachings of Kawakami and Colliopoulos. The dry powdered composition of Cockerill includes 65% sodium sulfate, 13% magnesium sulfate, 10% potassium sulfate and 12% sulfur that is mixed with the feed of a lactating mammal. None of the formulations of Cockerill includes a minimally degradable sugar nor any sugar. Cockerill does not teach or suggest anything with respect to a minimally degradable sugar. The compositions of Cockerill are dry powders. There is no teaching or suggestion of an aqueous hypertonic solution.

Hence, Cockerill does not teach or suggest elements of the instantly claimed compositions that are missing from the combination of the teachings of Kawakami and Colliopoulos.

None of Kawakami, Colliopoulos and Cockerill, alone or in any combination, teaches or suggests a composition that includes xylose as a water-soluble minimally degradable sugar in an amount that is from about 1 to about 3 times the weight of sodium salt in the composition. Therefore, for at least these reasons, the combination of the teachings of Kawakami and Colliopoulos and Cockerill does not teach or suggest every element of claims 1, 2, 8, 9, 37 and 38. Further, none of Kawakami, Colliopoulos and Cockerill, alone or in any combination, teaches or suggests an aqueous hypertonic solution required in claims 8 and 9. Therefore, the combination of the teachings of Kawakami and Colliopoulos and Cockerill does not teach or suggest every element of claims 8 and 9.

DECLARATION

Notwithstanding the above, the attached Declaration of Dr. Borody demonstrates results not taught or suggested by the cited art.

The combination of teachings of the references fails to teach or suggest a composition as instantly claimed. In addition, the combination of teachings of the reference does not teach or suggest the results achieved thereby. None of the cited references, singly or in any combination thereof, teaches or suggests a composition that includes a minimally degradable sugar, such as xylose, and the results achieved thereby. When readily degradable sugars, such as those used in the composition of Kawakami, are used as osmotic agents, they can be fermented by the intestinal flora, resulting in the production of explosive gases such as hydrogen and methane. None of the cited art provides any teaching or suggestion for replacing a readily degradable sugar such as taught in Kawakami with a minimally degradable sugar as instantly claimed. The specification, *Clinical Report* and the DECLARATION of Dr. Borody state that replacing easily degradable sugars with short chain minimally degradable sugars, such as xylose, avoids gas formation, bloating or cramps that can be caused by the fermentative breakdown of the degradable sugars. The inclusion of the minimally degradable sugar in the instant compositions allows for an increase of the tonicity of the composition in use without the adverse side effects that usually are associated with the inclusion of readily degradable sugars as osmotic agents. None of the cited art, alone or in combination, teaches or suggests these results.

The attached Declaration of Dr. Borody, the inventor of the instant claims, discusses results of a clinical trial in which a composition as instantly claimed was provided as a

purgative in combination with the magnesium citrate-based purgative PicoPrep™ in the form of capsules. This purgative combination was compared to aqueous PicoPrep™ solutions, PicoPrep™ capsules alone and the PEG-based purgative Glycoprep™ (52.9 g PEG, 2.6 g sodium chloride, 0.74 g potassium chloride and 5.6 g sodium sulfate and aspartame as a sweetener). The Declaration and *Clinical Study Report* describe experimental data similar to that presented in the application in Examples 4 and 5, and additional clinical and *in vivo* data.

Kawakami describes an isotonic magnesium citrate-based purgative. Magnesium citrate-based purgatives are known in the art. An exemplary magnesium citrate-based purgative is PicoPrep™, which includes 10 mg sodium picosulfate, 3.5 g magnesium oxide, 12.0 g citric acid and aspartame as a sweetener. It is known in the art that when dissolved in water, the magnesium oxide and citric acid combine to form magnesium citrate (see, *e.g.*, Hoy *et al.*, Drugs 69(1): 123-136 (2009)). PicoPrep™ purgative differs from the purgative described in Kawakami in that the PicoPrep™ purgative includes sodium picosulfate and does not include a readily degradable sugar – it is sweetened with aspartame. The PicoPrep™ purgative also differs from the purgative described in Kawakami it that the PicoPrep™ purgative is administered as a solution in approximately 250 mL (about 1 cup) of water or clear juice followed by administration of about 500 mL of water or clear juice. Hence, the PicoPrep™ purgative is not an isotonic solution as described in Kawakami. Neither the PicoPrep™ purgative nor the purgative described in Kawakami includes a minimally degradable sugar, such as xylose, in an amount that is from about 1 to about 3 times the weight of sodium salt in the composition.

The liquid formulation of the PicoPrep™ purgative and the instant composition administered with PicoPrep™ capsules were found to be more effective in cleansing the bowel than the PicoPrep™ purgative in capsule form administered with water or the Glycoprep™ purgative (see the *Clinical Study Report*, page 3, Summary-Conclusions section). When evaluating adequacy of colon cleansing, doctors found no difference between the preparations used (see page 30, the *Clinical Study Report*, Section 8.5, Efficacy Conclusions – Doctor Evaluation). When looking at specific areas of the colon, however, doctors and sedationists rated the instant composition administered with PicoPrep™ capsules as more effective in cleansing the transverse colon than PicoPrep™ capsules administered with water (see, *e.g.*, pages 28-31 of the *Clinical Study Report*).

Thus, the *Clinical Study Report* (30 June 2006) and the Declaration of Dr. Borody demonstrate that purgatives that include the instantly claimed composition are effective at

cleansing of the bowel. The *Clinical Study Report* and the Declaration of Dr. Borody also demonstrate that purgatives that include the instantly claimed composition are particularly effective at cleansing of the transverse colon. None of Kawakami or Colliopoulos or Cockerill, singly or in any combination, teaches or suggests that inclusion of a minimally degradable sugar at the requisite ratio would achieve these results.

There is no teaching or suggestion that using a minimally degradable sugar in a purgative composition avoids gas formation, bloating or cramps that can be caused by the fermentative breakdown of degradable sugars. None of the references, alone or in any combination, teaches or suggests that a purgative formulation containing a composition as instantly claimed is more effective at cleansing the transverse colon than existing magnesium citrate purgatives, such as the PicoPrep™ purgative in capsule form. None of Kawakami or Colliopoulos or Cockerill, singly or in any combination, teaches or suggests such results. Therefore, the claims cannot be obvious in view of the cited references.

Furthermore, to combine these references to result in the instant claims relies on the improper use of hindsight

"To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher" W.L. Gore & Associates, Inc. v. Garlock Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

The Examiner urges that it would have been obvious to replace the degradable sugars used in Kawakami with xylose because Colliopoulos includes xylose in a long list of sugars (many of which are easily degradable sugars) that can be used in its laxative formulation. Colliopoulos employs the sugars as sweeteners and does not suggest the advantageous properties for use of a minimally degradable sugar in a purgative composition. Thus, there is no teaching or suggestion in any of Kawakami or Colliopoulos or Cockerill to replace an easily degradable sugar with a minimally degradable sugar. It is the instant application that teaches this. Thus, the Examiner has combined the teachings of the cited references with the teachings of the application. Therefore, the Examiner improperly relies on hindsight.

Therefore, for any and all of these reasons, the Examiner has failed to set forth a *prima facie* case of obviousness. Applicant respectfully requests reconsideration and withdrawal of this rejection.

REBUTTAL TO EXAMINER'S ARGUMENTS

1. Sugar replacement

The Examiner alleges that "the skilled artisan would have been motivated with a reasonable expectation of success to use xylose in the composition as taught by Kawakami at the same ratios because xylose, glucose and fructose are functionally equivalent sweetening agents for laxative compositions."

Applicant respectfully disagrees. Colliopoulos does not teach or suggest that xylose, glucose and fructose are functionally equivalent sweetening agents for laxative compositions. Colliopoulos teaches that its laxative compositions can include a sweetener, and includes a list of exemplary sugars including xylose, ribose, glucose, mannose, galactose, fructose, dextrose, sucrose, maltose, partially hydrolyzed starch and corn syrup solids. Applicant respectfully submits that it is well known in the art that glucose and fructose are not functionally equivalent sweetening agents because fructose is sweeter than glucose (*e.g.*, see U.S. Pat. No. 4,308,349). It respectfully is submitted that no evidence is provided to support the Examiner's position that xylose, glucose and fructose are functionally equivalent sweetening agents in laxative compositions. The Examiner is reminded that MPEP 2144.03 states:

> The Examiner may take official notice of facts outside of the record which are capable of instant and unquestionable demonstration as being "well- known" in the art. *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). . . .

The facts of which the Examiner is taking notice are conclusory and are not capable of instant and unquestionable demonstration as being "well-known" in the art. MPEP 2144.03 continues:

> If justified, the examiner should not be obliged to spend time to produce documentary proof. If the knowledge is of such notorious character that official notice can be taken, it is sufficient so to state. *In re Malcolm*, 129 F.2d 529, 54 USPQ 235 (CCPA 1942). If the applicant traverses such an assertion the examiner should cite a reference in support of his or her position.

If this position is maintained, the Examiner must provide a reference supporting this position.

Notwithstanding this, Applicant respectfully submits that even if, arguendo, xylose, glucose and fructose are functionally equivalent sweetening agents in laxative compositions, replacing the sucrose or degradable sugar in the composition of Kawakami with xylose "at the same ratios" as suggested by the Examiner does not result in the instantly claimed compositions. The instant compositions include water-soluble minimally degradable sugar in an amount from about 1 to about 3 times the weight of sodium salt in the composition. The composition described in Kawakami is a 900 mL solution that includes 4.8-5.4 mM sodium chloride, 8.5-9.3 mM potassium hydrate and 10.7-2.1 grams sugar. As demonstrated in the

calculations provided in the Attachments, the ratio of sugar to sodium salt in the compositions described in Kawakami range from about 7.3 times the weight of the sodium salt (2.1g sugar/0.29 g NaCl) to about 42.8 times the weight of the sodium salt (10.7 g sugar/0.25 g NaCl). Accordingly, the ratio of sugar to sodium salt in the compositions of Kawakami is more than twice the upper recited limit of the minimally degradable sugar in the instant compositions. Therefore, even if one of ordinary skill in the art would replace the *sucrose or degradable sugar* in the composition of Kawakami with xylose "at the same ratios" as suggested by the Examiner, this does not result in the instantly claimed compositions.

* * *

In view of the amendments and remarks herein, reconsideration and allowance respectfully are requested.

Respectfully submitted,

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